# THE GENUS BATHYCOELIA A & S IN NEW GUINEA AND PRYTANICORIS GEN.NOV FROM THE NEW GUINEA AREA AND THE NEW HEBRIDES (HETEROPTERA-PENTATOMIDAE-PENTATOMINAE)

by

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### ABSTRACT

GROSS, G. F. 1978: The Genus Bathycoelia A & S in New Guinea and Prytanicoris gen.nov, from the New Guinea area and the New Hebrides. Rec. S. Aust. Mus. 17 (29): 417-428.

The genus Bathycoelia is recorded for the first time from New Guinea where it is represented by chlorospila Walker, originally described from the Chlorospila is redescribed and Aru Islands. figured and its male genitalia illustrated, the latter confirming that Bathycoelia is a member of the Pentatoma group, Prytanicoris gen.nov. is described and its four included species, ambivivens sp.nov. from New Guinea and the New Hebrides, dimorpha sp.nov. from New Guinea, novaebrittaniae from the Bismark Archipelago and solomonensis from the Solomons, are described and figured; the genitalia of ambivivens indicate it belongs to a new grouping of pentatomine genera near the Antestia group.

### INTRODUCTION

During a visit to the B. P. Bishop Museum in 1969 a series of large New Guinea Pentatomidae was selected out as probably belonging to a new genus of what was then known as the subfamily Halyinae but subsequently characterised (Gross, 1976, pp. 448-451) as a group of genera, the *Halys* group, of the subfamily Pentatominae as redefined in the preceding year (Gross, 1975, pp. 98-101, 104-109). Additional material of similar appearance was obtained in the New Hebrides during the 1971 Royal Society—Percy Sladen Expedition to these islands.

Closer examination proved that there were two genera in the series. The more greenish one proved to be *Bathycoelia* Amyot and Serville which was represented only in the New Guinea material by *chlorospila* Walker, previously known only from the type specimen from the Aru Islands. *Bathycoelia* was believed to belong to the *Pentatoma* group and dissection of its male genitalia has confirmed this. The second genus is new and likewise is not a member of the *Halys* group. On the basis of the elongated rima of the

scent gland and the form of its male genitalia it belongs to a hitherto unrecognised grouping of Pentatominae close to the *Antestia* group.

## ACKNOWLEDGMENTS AND ABBREVIA-TIONS OF INSTITUTIONS

Most of the material for this study was made available by the Bernice P. Bishop in Honolulu. abbreviated in the text to BISHOP, and by the British Museum of Natural History, abbreviated to BMNH. I am particularly indebted to the late Miss S. Nakata of Honolulu and Dr. W. R. Dolling of the British Museum in assisting in the selection and transmission of the material. Some of the specimens examined are in the South Australian Museum which is abbreviated to SAM. Funds for my visit overseas in 1969 were made available by the Sir Mark Mitchell Research Foundation and the C.S.I.R.O. Science and Industry Endowment Fund. The work in the New Hebrides was financed by the Royal Society of London and the Percy Sladen Trust,

The halftone illustrations of the dorsal aspect of the species were prepared by Mrs. Linda Blesing and for her meticulous work my thanks are recorded here.

### SYSTEMATICS

### Pentatoma Group

Bathycoelia Amyot & Serville, 1843

Bathycoelia Amyot & Serville, 1843, p. 110; type: Pentatoma buonopoziensis Palisot de Beauvais, 1805 (monobasic). Stal, 1865, p. 189; 1876, p. 101. Kirkaldy, 1909, p. 139. Bergroth, 1913, p. 230. Distant, 1914, p. 376.

Bathycelia (sic) Herrich-Schaeffer, 1853, pp. 290, 326.

Gastraulax Herrich-Schaeffer, 1844, p. 61; type: Gastraulax torquatus Herrich-Schaeffer, 1844 (first mentioned species). Herrich-Schaeffer, 1853, p. 326; synonymy with Bathycelia (sic). Bergroth, 1906, p. 9. Kirkaldy, 1909, pp. xxxi and 139. Bergroth, 1913, p. 230; synonymy with Bathycoelia.

Jurtina Stål, 1867, p. 518; type; Pentatoma longirostris Moutrouzier & Signoret, 1861 (monobasic). Stål, 1876, p. 101. Distant, 1902, p. 223. Bergroth, 1906; p. 9; synonymy with Gastraulax. Bergroth, 1913, p. 230; synonymy with Bathycoelia.

Large greenish, greyish-green or ochraceousgreen Pentatominae with head rather triangular, ocelli widely separated, second segment of antennae shorter than third, labium reaching onto abdomen and considerably surpassing hind coxae, sometimes reaching almost to apex of abdomen; anterolateral margins of pronotum nearly straight and lateral angles acute or slightly produced; scutellum with a black, purple or green metallic spot in each anterior angle; rima of scent gland produced as a long keel to near upper margin of metapleuron; tibiae sulcate or not; venter slightly raised basally and strongly sulcate to receive the labium medially.

Remarks: The genus ranges from Africa through the Comoro Islands, Madagascar, Réunion, India, Malaysia, the Phillippines, Indonesia, Aru Islands, New Caledonia and the Loyalty Islands to the New Hebrides and Fiji and is here recorded from New Guinea for the first time.

Bathycoelia was placed by Stal (1876) and Distant (1902) with such genera as Alciphron, Glaucias (as Zangis) and Nezara which I (Gross, 1976, pp. 448-451) have shown to be closely related to each other as a grouping of genera provisionally called the Pentatoma group. The form of the aedeagus and claspers of the species redescribed below from the Aru Islands and New Guinea indicates that Bathycoelia does belong to this group, the claspers having some similarity to those of Plautia and the aedeagus to Glaucias and Alciphron (Gross, 1976, figs. 201 A-F, 202 A-B). The long rima of the scent gland opening and a greenish color are additional features, along with its general appearance, confirming its placement in the Pentatoma group.

Specimens from New Guinea, despite a somewhat more speckled appearance, appear on measurement to be conspecific with *Bathycoelia* chlorospila Walker, 1867, from the Aru Islands. As it is a unique specimen the genitalia of the type of chlorospila have not been examined to confirm this.

Bathycoelia chlorospila belongs to that section of the genus in which the tibiae are sulcate whereas the species from more eastern Pacific Islands, notably B. longirostris (Montrouzier & Signoret, 1861) from New Caledonia and B. simmondsi Izzard, 1932, from Fiji and the New Hebrides, have rounded tibiae.

# Bathycoelia chlorospila Walker, 1867

Figs. 1, 2 A-C

Bathycoelia chlorospila Walker, 1867, p. 350. Bergroth, 1913, p. 230.

Gastraulax chlorospilus Kirkaldy, 1909, p. 140,

Holotype yellowish-restaceous but probably green in life. New Guinea specimens greyish-green with a finely speckled appearance. On dorsum numerous brown (type) or brownish-black punctations with some punctations, patches of punctations and markings iridescent greenish-black.

Head with anteclypeus, ocular peduncle and a patch inside and behind each eye glabrous; behind anteclypeus transversely strigose and except for two central longitudinal lines of punctations, impuncate. This glabrous area bordered on either side by a longitudinal line of punctations and another longitudinal line extends forward from ocelli. Juga obliquely strigose and punctate in their inner halves. At each inner basal angle of juga a black spot and lateral margins of juga narrowly black. Ocular peduncles flattened behind and touching anterior margins of pronotum. Antennae slender, length of segments (holotype) 1.14, 1.67, 3.38 mm, fourth and fifth missing but in one New Guinea male with the full number of segments 0.93, 1.72, 2.96, 3.64, 3.22 mm and in a New Guinea female 0.73, 1.88, 3.43, 3.90, 3.70; first segment pale brown, sometimes darkened basally and apically, second and third black, fourth pale brown in basal, third to half and dark apically, fifth pale brown with a broad blackish annulation after the middle.

Pronotum with anterior margin obliquely truncate behind eyes and trapeziformly excavate behind collum, anterior angles formed into a small blunt spine, anterolateral margins almost straight and moderately acute, lateral angles shortly produced and almost rectangular, posterolateral margins vaguely sinuated, posterior margin almost straight; disc with some transverse very low ridges in a somewhal vermiculate pattern, calli glabrous, inwardly of each anterior angle a triangular patch of iridescent greenish-black or purplish punctations, these two patches sometimes connected by a narrow line of similar punctations just behind anterior margin.

Scutellum with a prominent greenish-black or purplish, transversely strigose, circular macula in

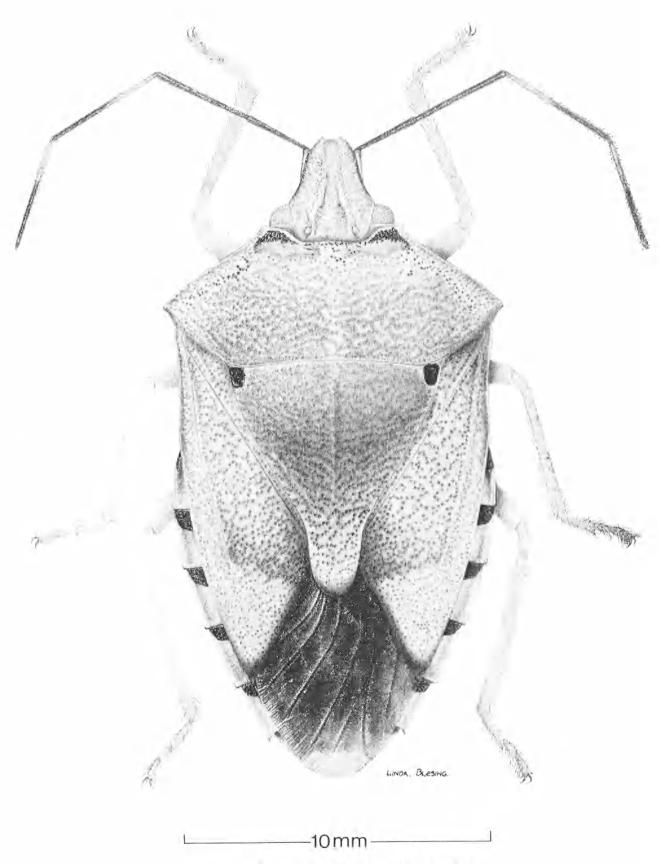


FIG. 1. Dorsal aspect of Bathycoelia chlorospila Walker.

each basal angle; apex broadly rounded; disc only slightly raised anteriorly and punctations tending to be arranged in short lines to form a vermiculate pattern.

Hemelytra narrower than abdomen for most of their length, membrane just surpassing apex of abdomen; punctations on coriaceous portions tending to form groups or short lines to give a vermiculate appearance; membrane smoky hyaline with prominent, mostly parallel, veins.

Laterotergites with posterior angles acute and black tipped, anteriorly on each laterotergite a large purplish or greenish-black macula.

Dorsum of abdomen not seen.

Head beneath impunctate and yellowish, a short iridescent greenish-black or black line beginning at anterior margins of eyes and passing forward over antennifers but not nearly reaching apex; labrum well developed; labium reaching onto sixth abdominal ventrite, stylets and extreme apex blackish.

Thorax beneath yellowish, propleura and sometimes hind part of metapleura with fine brownish punctations; mesosternum with a low raised keel; anteriorly of each fore coxa an elongate black spot, exteriorly on propleuron a curved black streak starting on anterior margin and extending at least half length of segment, anteriorly on mesopleuron a small black spot exteriorly and partly concealed under hind margin of propleuron, on metapleuron a curved black streak exteriorly margining the evaporative area; evaporation area with a vermiculate pattern, peritreme long and raised. Legs yellowish and not unduly long, tibiae sulcate exteriorly.

Abdomen with segments III-VI broadly sulcate medially; exterior anterior angles of each segment black, behind each spiracle a small black spot and midlaterally an oblique dark spot on anterior margin of segments IV-VII; male genitalia concealed by ventrite VII, hind margin of pygophore forming a smooth concave curve but interiorly of this a complex, sinuous upright septum, a membranous eighth segment is present in front of the pygophore. Claspers, fig. 2C, large and T-shaped with a small lateral lobe on the main shaft. Aedeagus, fig. 2A-B, with phallosoma moderately sclerotized, three conjunctival lobes present. one dorsal and two lateral, the latter sclerotized at their apices; medial penial plates lying on either side of a short sclerotized vesica and rather Female first gonocoxae somewhat convex and with hind margins faintly curved, paratergites IX rather triangular with rounded apices.

Length (holotype) 19.2 mm, (range) 18.7-21.6 mm.

Maximum width (holotype) 10.4 mm, (range) 10.4-11.9 mm.

Remarks: The original description of Walker is too brief to adequately characterise this species.

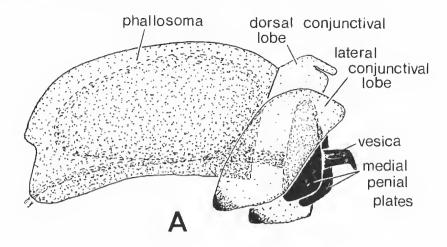
Location of type: Holotype &, ARU ISLANDS, Saunders. 65-13, in BMNH.

Specimens Examined: The type and NEW GUINEA-PAPUA Daradae Plantation, 80 km north to Port Moresby, 500 m, 4 & 6.ix,1959, T. C. Maa; NORTH-EASTERN paratype & 2 \( \text{\$\gamma}\$, Wau, Morobe District, 1 200 m, 20.iii.1964, 16.vii.1961 2-10.xi.1961, the two females at light, J. & J. H. Sedlacek, IRIAN JAYA \( \text{\$\gamma}\$, W. Sentani, Cyclops Mountains, Hollandia area, 150-250 m, 25.vi.1959, T. C. Maa; \( \text{\$\gamma}\$, Bodem, 11 km S.E. of Oerberfaren, 7-17.vii.1959, in MV light trap, T. C. Maa; \( \text{\$\gamma}\$, Waris S. of Hollandia, 450-500 m, 1-7.viii.1959, T. C. Maa; all specimens except the type in BISHOP.

# Prytanicoris Group

The new genus Prytanicoris is very similar in appearance to New Guinea members of the Halys group (c.f. species of Acanthidicllum Kirkaldy, 1904 = Bromocoris Horváth, 1915 and Coctoteris Stal, 1858), especially in its large size, rather rectangular head, produced lateral angles of the pronotum and slender antennae. However, the long rima of the scent gland is suggestive of a position somewhat nearer the Antestia, Pentatoma and Rhynchocoris groups though the form of the animal excludes it from any of those Dissection of the aedeagus confirms a three. placing close to the Antestia group. Prytanicoris may in fact lie somewhere along the line of development from the Halys group to Antestia and the two other groups (Pentatoma and Rhynchocoris) with a long rima. If so the Antestia group should be derived more directly from the Halys group, than from nearer the Asopus group as previously suggested (Gross 1975) in discussing the origins of the various groups of Australian genera of Pentatominae.

Although the Prytanicoris group is known at the moment only from the New Guinea, Bismark, Solomons and New Hebrides areas, its presence in this region adjacent to Australia further suggests that nearly all the groups of genera of Pentatominae in the Australasian region, except the Podops and Strachia groups, can be easily visualised as deriving from the Asopus-Poecilotoma-Halvs groups axis.



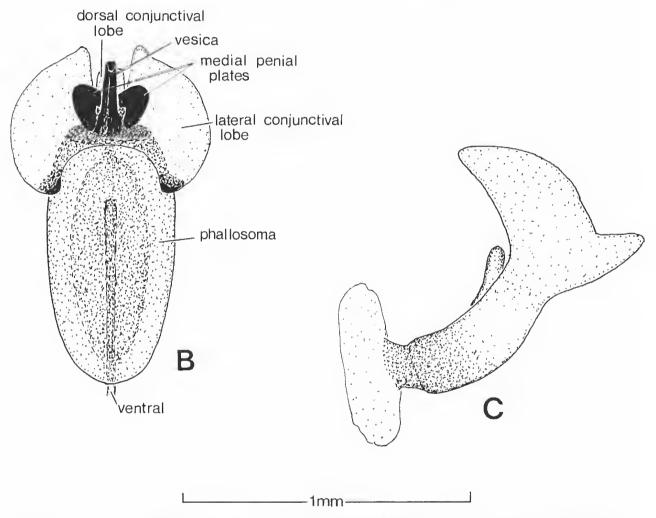


FIG. 2. A-C. Bathycoelia chlorospita (Walker), A. aedeagus-sinistral aspect. B. ditto-ventral aspect. C. Clasper.

The features of the *Prytanicoris* group must for the time being be those of its only included genus.

### Prytanicoris gen.nov.

Large or medium sized, speckled brown or blackish Pentatominae with head elongate and for most of its length parallel sided but anteriorly broadly rounded, apices of juga not quite reaching apex of anteclypeus, ocelli widely separated and just behind a line between hind margin of eyes, second segment of antennae shorter than third, labium reaching onto third segment of abdomen; anterior margins of pronotum trapeziformly excavate behind collum and obliquely truncate behind eyes, slightly separated from

latter, anterior angles produced as a blunt tooth, anterolateral margins of pronotum nearly straight and lateral angles produced as a conical recurved spine or rectangularly produced, posterolateral margins somewhat sinuate, posterior margin straight; scutellum only slightly raised anteriorly on disc, apex rounded, a black fovea in each basal angle; bucculae long and low but not reaching base of head; mesosternum with a very low keel; tibiae sulcate on their outer surfaces; second abdominal ventrite constricted and depressed, abdomen medially not sulcate. Claspers (Fig. 4 C-E) foliaceous with a small hook like process dorsally or posteriorly; aedeagus (Fig. 4 A-B) with phallosoma lightly sclerotized, medial penial plates ventral and strap like; two small, lateral, membranous conjunctival lobes and a pair of parallel dorsal lobes which are membranous dorsally and sclerofized ventrally, vesica free apically and emerging between the lateral conjunctival lobes.

Type: Prytanicoris ambivivens sp.nov.

Prytanicoris is known from four species which may be separated as follows:—

Key to species of Prytanicoris gen.nov.

- Large species, usually over 17 mm in length and sometimes over 21 mm and 10.4 mm-12-3 mm in width; lateral angles of pronotum produced into a sharp slightly recurved spine ambivivens n.sp.
- (1) Lateral angles of pronotum produced into a conical process; dorsal appearance brown and abdomen without a black subjected stripe.
  3
  - Lateral angles of pronotom obtuse and abdomen with dark iridescent, broad, sublateral stripe - solomoneusis n.sp.
- (2) Males under 16 mm in length and under 9 mm in width; from New Guinea ...... dimarpha n.sp. Males over 17 mm in length and 9 mm in width; from the Bismark Archipelago ... novuebrituniae n.sp.

# Prytanicoris ambivivens sp.nov.

Figs. 3, 4 A-C

Ground colour yellowish-orange with numerous brown punctations and small brown patches joining and surrounding punctations making the dorsum appear brown and finely speckled.

Punctations on juga sparse interiorly, exteriorly dense and concentrated into a broad sublateral line, latter frequently iridesecent green or blackish-green. Between eyes and almost to base of collum six parallel lines of brown punctations, the outer pair of each side joining and terminating behind ocelli where they are frequently greenish, these sending a small side branch to hind margins of eyes. Anteclypeus anteriorly and laterally dark, in its basal half a

medial orange glabrous streak which is continued to base of head. Length of antennal segments (holotype)—11.04, II 1.77, III 3.07, IV 4.00, V 3.04; (allotype)—I 0.99, II 1.92, III 2.91, IV 4.16, V 3.70 mm; first to third segments yellowish but black exteriorly, second and third maculated with brown and third infuscated at extreme apex, fourth and fifth brown with base orange-yellow.

Pronotum with anterior angle produced into a small, blunt, reflexed tooth, behind this on lateral margin a few crenulations, rest of anterolateral margin nearly straight and terminating in a reflexed spinose process just before true lateral angles; lateral angles shortly rounded, posterolateral and posterior margins nearly straight. On disc of pronotum a small tumescence just interiorly of each lateral angle; punctations on most of disc discrete and arranged in short randomly directed lines, around each punctation a small brown annulus, these coalesce to form lines here and there, anteriorly and laterally of each callus a dense patch of iridescent greenish or greenish-black punctations.

Scutellum marked as for hind portions of pronotum.

Hemelytra narrower anteriorly than hinder parts of thorax but considerably narrower than abdomen for most of their length. Clavus and corium marked as for disc of scutellum and hind portion of pronotum. Membrane fumose-hyaline with brown and apically parallel veins. Laterotergites yellowish, anteriorly on each an oblique broad bar and posteriorly a rhomboidal patch which are iridescent greenish or blackish and punctate, hind angles of each laterotergite produced into a small, backwardly directed, infuscated tooth.

Dorsum of abdomen not completely seen but apparently mostly yellowish-orange.

Except for a few fine punctations along base of bucculae head beneath yellow and impunctate, from anterior margin of eye and running forward to in front of antennifer a curved iridescent greenish or blackish line, in front of this and separated from it and apex of head an elongate brown streak on underside of juga. Labrum and labium yellowish but ventrally narrowly black, apical segment of latter also black. Thoracic pleura yellow and finely brown punctate, so also on epipleura and epimera and posteriorly on propleuron and metapleuron. At apex of first and second coxal clefts a small black spot, propleuron with an elongate spot of dark iridescent punctations midway betwen apex of coxal cleft and outer margin which does not reach

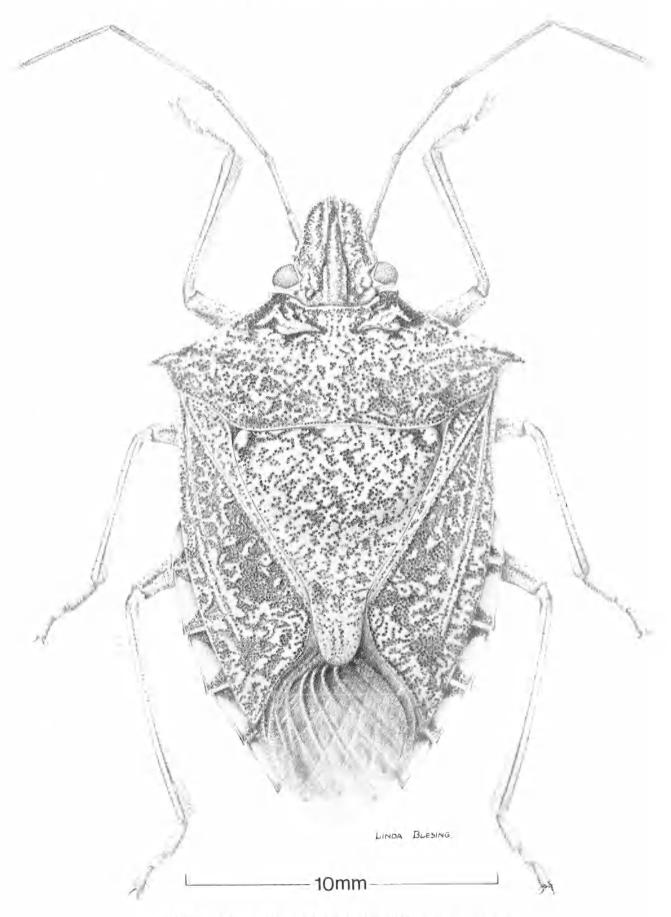


FIG. 3. Dorsal aspect of Prytanicoris ambivivens gen. & sp.nov.

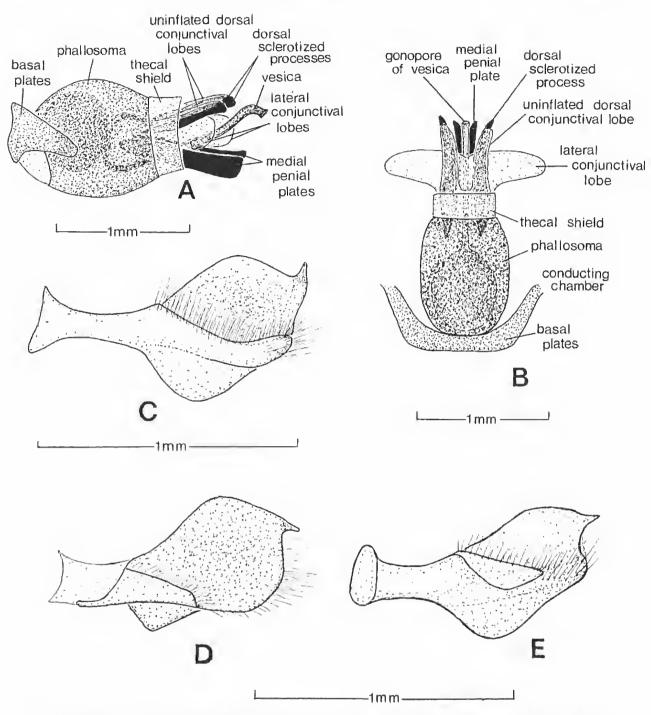


FIG. 4. A.C., Prytanicoris ambivivens gen. & sp.nov. A. aedeagus-sinistral aspect. B. ditto-dorsal aspect. C. clasper. D. Prytanicoris dimorpha sp.nov.—clasper. E. Prytanicoris novaebrittaniae—clasper.

anterior margin but joins a short transverse similarly coloured line in a sulcus just behind anterior margin; on meso- and metapleura a small spot centrally in line with the anterior spot and the abdominal spiracles. Legs normal and yellowish, fore femora maculated with brown in their apical three quarters, middle and hind femora only maculated apically, sulci of tibiae margined with black, apices of claws black.

Abdomen yellowish beneath, spiracles black. Hind margin of pygophore deeply excavated with lateral lobes rounded when viewed from below but with a more inner oblique short black ridge when viewed from behind, projecting into the excavated a pilose bilobed structure. Clasper (Fig. 4C) with a short thick basal portion which is expanded on both sides distally into membranous extensions, the upper one hooked dorsally. Aedeagus (Fig. 4A-B) with phallosoma mediumly sclerotized and provided with a short membranous thecal shield. First gonocoxae of female with posterior margins somewhat concave, top of ninth paratergites slightly reflexed.

Length: (holotype) 19-2, (allotype) 21-7, (range paratypes) 17-2-20-9 mm.

Width: (holotype) 11-2, (allotype) 12-7, (range paratypes) 10-4-12-3 mm.

Types: All from Wau, Morobe District, Northeast New Guinea and unless otherwise stated at 1 200 m altitude, in M.V. light trap and collected J. Sedlacek—HOLOTYPE 8, 11-12 Apr. 1964. J. & M. Sedlacek; ALLOTYPE 9, 1 250 m. 9 Jan. 1963; PARATYPES 2 2, 200 m, 25 Mar. 1956, Gressitt & Willies, 2 9, 1-20 Nov. 1961; 2, 9 Apr. 1964; 2, on Coviak Ridge, 763 m. 7 Dec. 1963, H. C.; &, 5-13 Mar. 1964; & & Q, 14-24 Mar. 1964; 9, Mount Missim, 1 150 m (not at light); € & 5 ₽, 3-7 Apr. 1964; ₽, 11-12 Apr. 1964, J. & M. Sedlacek; 9, 15 Apr.-15 May 1964, M. Sedlacek; & Hospital Creek, Feb. 1965, J. & M. Sedlacek; 3. Hospital Creek. 17 Feb. 1965, in Malaise trap; 1 & & 2 9, Hospital Creck, 7 Mar. 1965, J. & M. Sedlacek. All in BISHOP.

Other specimens examined: NORTHEAST NEW GUINEA Fermin (3 BISHOP), Mt. Missim (1 BISHOP), Mokai in Torricelli Mts. BISHOP), Pindiu in Huon Peninsula (1 BISHOP). PAPUA Agenehambo near Popondetta (2 SAM), Kiunga on Fly River (9 BISHOP). IRAN JAYA Humboldt Bay District (4 BMNH), Tor River mouth-4 km E. of Hollandia (Kota Raya) (3 BISHOP), Waris-S. of Hollandia (5 BISHOP), Ifar-Cyclops Mts. (1 BISHOP), Mt. Sabron-Cyclops Mts. (7 BMNH), Bewani Mts. (1 BMNH), Urupuru-Wissel Lakes (1 BISHOP), Sabil Valley-Star Mts. (1 BISHOP). WAIGEU Camp Nok (8 BMNH). WOODLARK (MURUA) Kalumadau Hill (2 BISHOP). NEW HEBRIDES Vila—Efate (2 SAM).

Remarks: The Woodlark specimens are darker than those from the other localities and the New Hebrides specimens have the green iridescent areas on the pronotum strongly developed along the antero lateral margins and the lateral angles are more shortly spined. 'The New Hebrides and Woodlark specimens may represent two further new species but unfortunately both specimens of each form are female so the shapes of the male claspers remain unknown, the colour patterns and measurements are, however, consistent with ambivivens.

### Prytanicoris dimorpha sp.nov.

Fig. 4D, 5A

Ground colour yellowish-orange with numerous brown punctations and areas of dense blackish-green iridescent punctations making the animal appear brown macroscopically. Females markedly larger than males.

Punctations on juga sparse interiorly, exteriorly dense and darker and concentrated into a sublateral line. Interiorly of each eye a glabrous patch and head laterally behind eyes glabrous. interiorly of each glabrous patch two lines of concentrated punctations running forward from ocelli, the outer one frequently turning outward apically to join line on juga, behind ocelli fused to base of head and sending an oblique branch to interior of eye. Length of male antennal segments in millimetres-holotype first, paratype in brackets—I 1.0 (1.0), II 1.7 (1.6), III 2.8 (2.6), IV 3.8 (3.6), V missing; length of female antennal segments-allotype first, paratype in brackets— $1.1 \cdot 1 \cdot (1 \cdot 0)$ , II  $1 \cdot 7 \cdot (1 \cdot 6)$ . III 2.9 (2.9), IV missing (3.6), V missing. First and third antennal segments yellowish with brown maculations, first dark exteriorly, third darkened apically; second sometimes brown, sometimes yellow maculated with brown; third brown but paler basally.

Pronotum with anterior angles produced into a small, blunt, reflexed tooth, behind this anterolateral margins vaguely crenulate anteriorly and straight posteriorly, terminating in a blunt short conical process just before true anterolateral angles. Lateral angles obtusely rounded, posterolateral margins vaguely sinuate and posterior margin nearly straight. On disc of pronotum a small low tumescence just interior of each lateral angle, punctations mostly discrete but aligned in a rather vermiculate pattern, around each callus and sublaterally an interrupted line of dense iridescent darker punctations.

Scutellum and coriaceous portions of hemelytra marked as for hind portion of pronotum. Sometimes a reddish diffusion posteriorly on latter. Membrane fumose hyaline with brown veins.

Dorsum of abdomen not seen but laterotergites yellowish with a dark rugulose patch anteriorly and posteriorly on each.

Head beneath yellowish and finely, sparsely and almost concolorously punetate. Running forward from each eye to over and before each antennifer a black streak, another dark streak in front of this but more exteriorly under each jugum. Labrum and labium yellowish but latter ventrally and apically black. Thoracic pleura finely and sparsely dark punetate, anteriorly or propleuron a T-shaped mark of dense iridescent punctations with the head of the T near the anterior margin, on mesopleuron a small triangular patch of similar punctations on disc and on metapleura u

not so well developed oblique bar exteriorly of evaporative area, a short iridescent-dark line exteriorly in anterior half. Legs normal and yellowish, femora speckled with brown except at base, tibiate more finely speckled and sometimes darkened apically, claws black in apical halves.

Abdomen yellowish, spiracles black. Hind margin of pygophore deeply and triangularly excavated, lateral lobes truncate apically, their transverse axes at the truncation directed obliquely inwards. In the anterior notch of the excavation semicircularly excised behind this a black macula and directed obliquely posteriorly from the notch and macula a groove. Clasper Fig. 4D similar to that of ambivivens but there is no thickened portion dividing the membranous apical portion into two, the ventral extension of the membranous expansion is triangular in shape and the upper portion is hooked apically, not dorsally.

Length: (holotype) 15.6, (allotype) 17.7, (male and female paratypes) 15.6 and 18.7 mm.

Width: (holotype) 8-5, (allot type) 10-3, (male and female paratypes) 8-8 and 10-1 mm.

Types: Holotype &, JRIAN JAYA, Waris S. of Kota Raya (= Hollandia), 450-500 m, 24-31 Aug. 1959, T. C. Maa; allotype and paratype ♀ PAPUA, Owen Stanley Range, Goilala—Loloipa, 1-15 Feb. 1958, W. W. Brandt; paratype &, same data as allotype except date 21-31 Dec. 1957. All in BISHOP.

### Prytanicoris novaebrittaniae sp.nov.

Fig. 4E, 5B

Very similarly marked to P, dimorpha but males significantly larger (length 17.1 to 15.6 mm). As the unique type is male it is not known whether there is a marked size difference between the sexes. The following charac-The four basal antennal segments ters differ, are yellow with only a faint suggestion of darker maculations, there is a dark subapical annulus on the third (fifth missing). Lengths antennal segments (holotype)-I 0.9, II 1.6, III 2.6, IV 3.7, V?. On the disc of head behind base of anteclypeus there are six, not four distinct longitudinal rows of punctations. The coriaceous parts of hemelytra are reddish-orange all over with the punctations, except on clavus, very little darker. Head beneath almost glabrous with a line of fine punctations along bucculae. Lateral lobes of pygophore with a small tooth at the ventral end of the truncate lateral lobes. Clasper Fig. 4E very similar to dimorpha with the upper membranous extension booked apically but with a medial thickened longitudinal portion so that there are upper and lower laminate sections,

Length: 17 1 mm. Width: 9.9 mm.

Type: Holotype &, NEW BRITAIN, Keravat, 30 m, 4 Apr. 1956, in light trap, J. L. Gressitt, in BISHOP.

## Prytanicoris solomonensis nov.sp.

Fig. 5C

Much darker in appearance than the preceding species (except the Woodlark specimens of ambivivens) and with lateral angles of pronotum bluntly rectangular. Ground colour yellow with numerous shining piceous punctations.

Punctations on juga absent along extreme margin and sparse interiorly, on disc of juga forming a dense piceous bar. Between eyes six lines of punctations, the inner four parallel, the outer two curved in front of ocelli and oblique behind ocelli, these joined by a cross branch to outer of straight lines. Length of antennal segments—I 1·1, II 1·9, III 2·9, IV & V missing. First antennal segment pale basally and brown apically, exteriorly this brown more extensive than interiorly; second and third segments yellowish-brown with faint brown maculations, third infuscated apically.

Pronotum with anterior margin obliquely thickened behind eyes and anterior angles produced into a small, blunt tooth; behind this anterolateral margins entire and straight, terminating as a right angle just before true lateral angles. Latter obtusely rounded, posterolateral margins faintly concave and posterior margin straight. On disc of pronotum a small tumescence just interior of each lateral angle, punctations piceous and mostly surrounded by a brown ring, many of the punctations arranged in vaguely transverse rows with the brown rings coalescing to form brown lines, calli piceous.

Scutellum and corjaceous portions of hemelytra marked like disc of pronotum but punctations in apex of former small, sparse and not ringed with a brown annulus, and on hemelytra the dark lines more irregularly disposed. Membrane fumose hyaline with concolorous veins,

Dorsum of abdomen not seen, laterotergites blackish with a large orange spot on lateral margin of each (not reaching incisures), strongly punctate, punctations in black areas black and in orange areas orange.

Head beneath yellow, smooth except for a few punctations along base of bucculae and immediately in front of antennifers. Behind eye

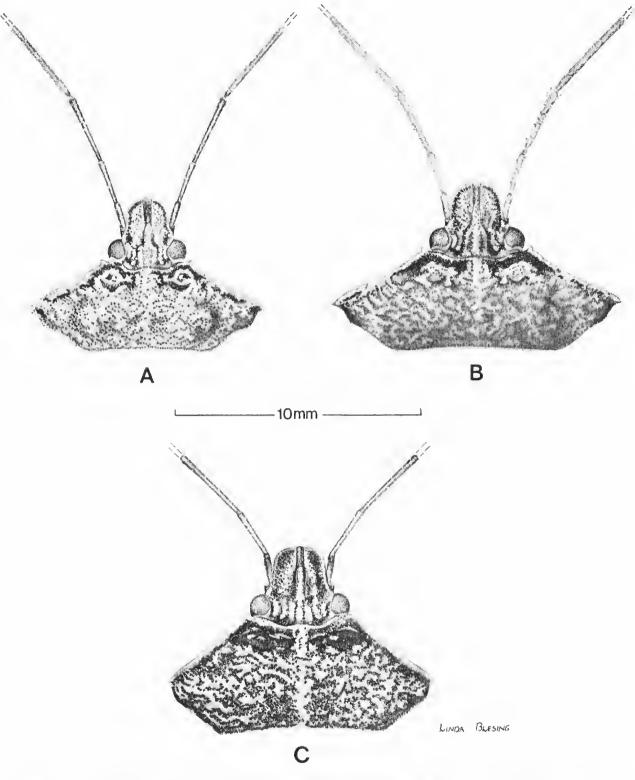


FIG. 5. A. Dorsal aspect of anterior portion of *Prytanicoris dimorpha* sp.nov. B. Dorsal aspect of anterior portion *Prytanicoris novaebrittaniae* sp.nov. C. Dorsal aspect of anterior portion of *Prytanicoris xolomonensis* sp.nov.

narrowly brown, in front of eye a brown bar passing forward over antennifer and tapering to end about half way to apex of head, on underside of juga a brown bar and in front of antennifer a diffuse brown patch. Labrum and labium yellowish but both ventrally black, stylets and apical segment of labium also black. Thoracic pleura yellowish and sparsely punctate except posteriorly on propleuron where punctations are coarser. On disc of propleuron a large, greenish, iridescent, vaguely rectangular marking; on mesopleuron a brown to piceous patch at apex of

coxal cleft and another on disc nearer anterior margin than posterior; metapleuron darkened on evaporative area and behind and exteriorly of latter. Legs yellowish brown, femora faintly speckled with brown, tibiae darkened on either side of sulcus, tarsi darkened dorsally and laterally, claws dark in apical halves.

Abdomen yellowish, spiracles and a brown longitudinal band passing just below them brown, a short brown bar posteriorly in centre of segment VII. First gonocoxae mostly piceous along with interior halves of eighth paratergites.

Width: 9.9 mm.

Type: Holotype 9, SOLOMON ISLAND, Bougainville (S.), Mosigata, 25 m, 3 May 1956, E. J. Ford Jr., in BISHOP.

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